SERVICE MANUAL

PD-502/502B
PD-701/701B

Belt Drive SEMI
AUTO Tunrtable

Sherwood

Specifications

MOTOR AND TURNTABLE SECTION

Drive System	Belt Drive system, auto return and auto reject functions
Motor	EG DC Motor
Speed	33-1/3R.P.M, 45R.P.M
Wow & Flutter	Less than 0.08% WRMS
Rumble or S/N	Better than 60dB(DIN-B)
Turntable Platter	310mm aluminium alloy die-cast

TONEARM SECTION

Effective Length	225mm
Offset Angle	24.5degrees
Tracking Error	+ 2.6, — 1 degrees
Overhang	15mm

CARTRIDGE SECTION

Type	1/2″ MTG. system, with 0.6mil stylus moving magnet type
Frequency Response	20~20,000Hz
Output Voltage	3.5mV at 1KHz 3.54cm/sec
Channel Balance	Within 3dB at 1KHz
Channel Separation	More than 18dB at 1KHz
Load Resistance	47KΩ
Weight	Min 4g~Max 10g
Stylus Pressure	Min 2g~Max 2.5g

OPERATION

Cueing	Button push
Speed Selector	Push switch
Power Requirements	AC120V, 60Hz for UL, CSA AC220V, 50Hz for Europe AC240V, 50Hz for BSI, SAA

GENERAL

Power Consumption	3.5W
Dimensions	440(W)×117(H)×360(D)mm
Net Weight	4kg(8.8 lbs)
Accessories	45R.P.M adapter

NOTE: Design and specifications subject to change without notice for improvements.

Contents

Specification 1
Contents 2
Controls 3
Principal Parts Location 4
Adjustment 5
Part List & Explode View of Cabinet & Chassis 7
Ports List & Top View of P.C Boards 10
Point to Point Wiring Diagram 11
Paking View & Parts List 13
Block Diagram 14
Schematic Diagram 15

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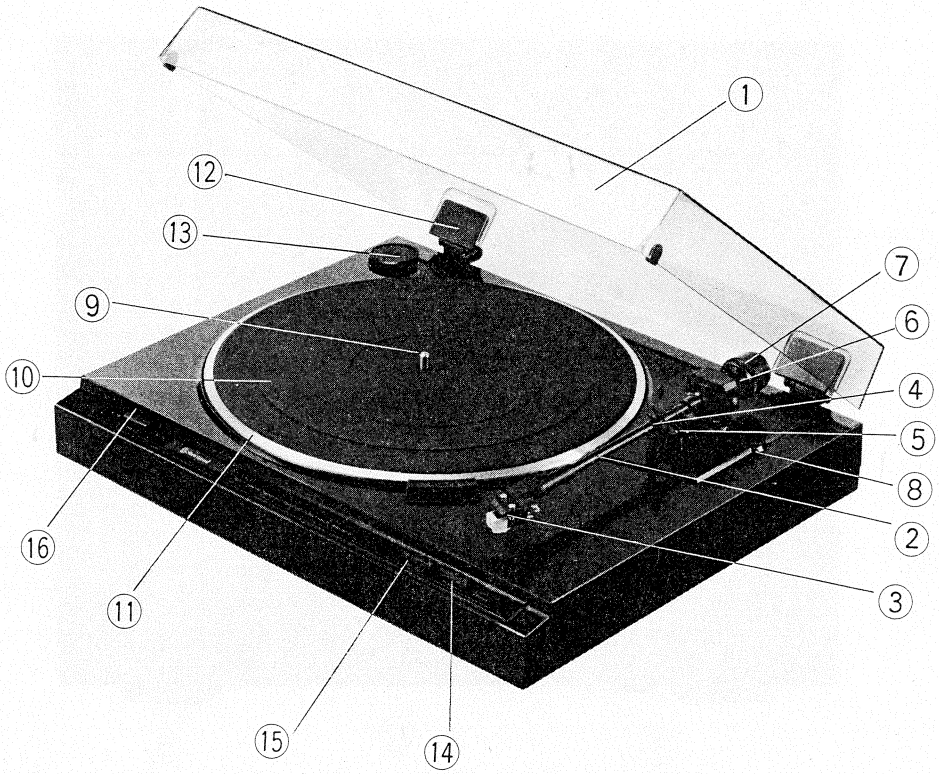
Controls



1. Dust Cover
2. Tonearm
3. Cartridge/Head Shell
4. Arm Rest
5. Arm Elevation
6. Counter Ring
7. Counter Weight
8. Anti-Skating Device
9. Turntable Shaft
10. Rubber Sheet
11. Turntable Platter
12. Hinge
13. 45R.P.M Adapter
14. Cueing Button
15. Reject Button
16. Speed Selector Button

Principal Parts Location

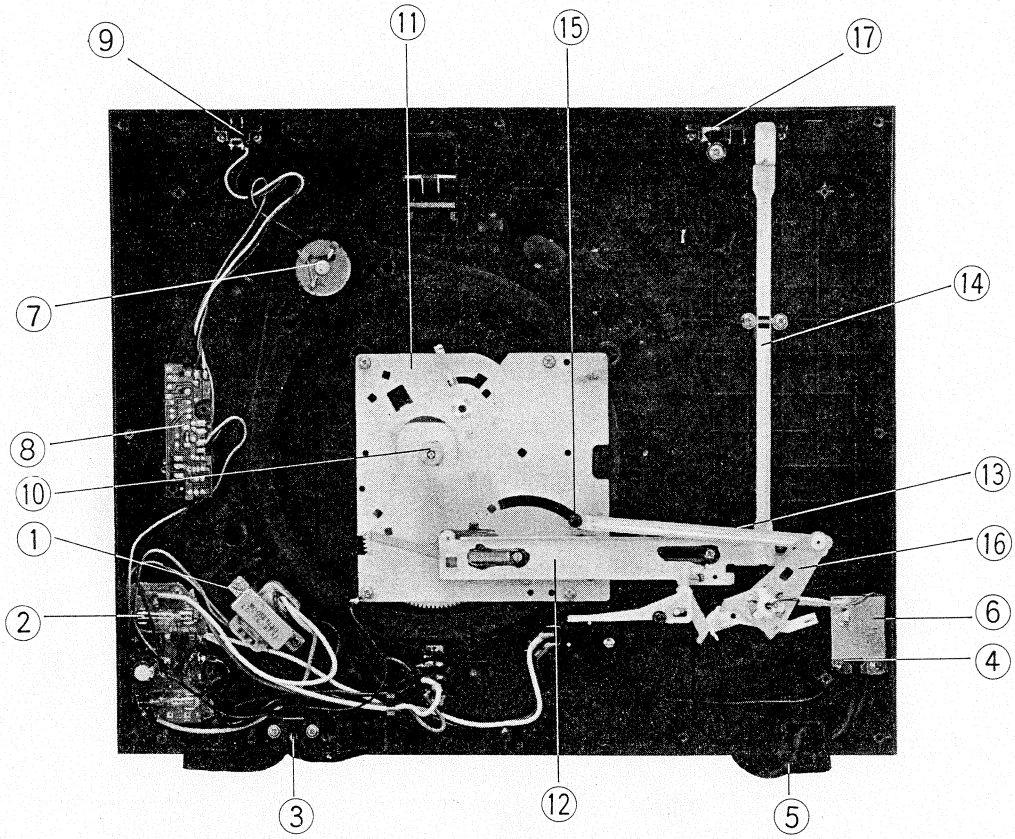


Fig. 1

1. POWER TRANSFORMER
2. POWER P.C BOARD
3. AC CORD
4. PHONO P.C BOARD
5. PHONE CORD
6. SHIELD COVER
7. EG DC MOTOR(BFF2R 56T)
8. MOTOR CONTROL P.C BOARD
9. SPEED SELECTOR SWITCH
10. SPINDLE
11. BASE PLATE
12. SLIDE ARM
13. JOINT LEVER
14. CUEING LEVER
15. TRIP LEVER
16. RESTORE LEVER
17. REJECT LEVER

Adjustment

I. STYLUS LINE ADJUSTMENT

1. Loosen the Cartridge locking screws(D) lightly. (**Fig.2**)
2. Move the tonearm above the Stylus Line Direction and adjust the cartridge until the stylus tip lies on the Stylus Line.
3. Tighten the screws to secure the cartridge in place.

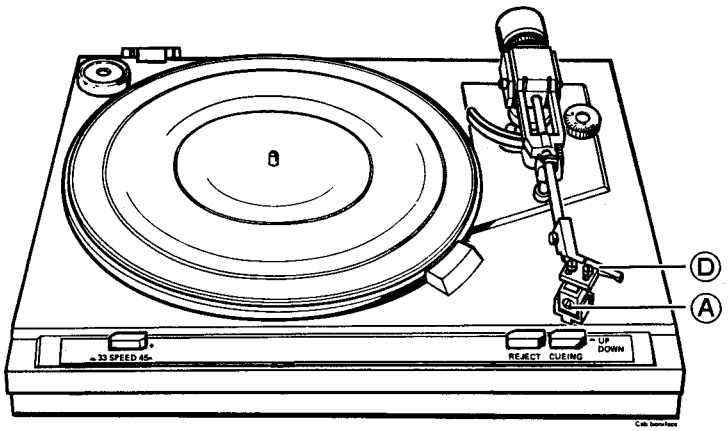


Fig. 2

II. CARTRIDGE INSTALLATION(Fig. 3, Fig. 4)

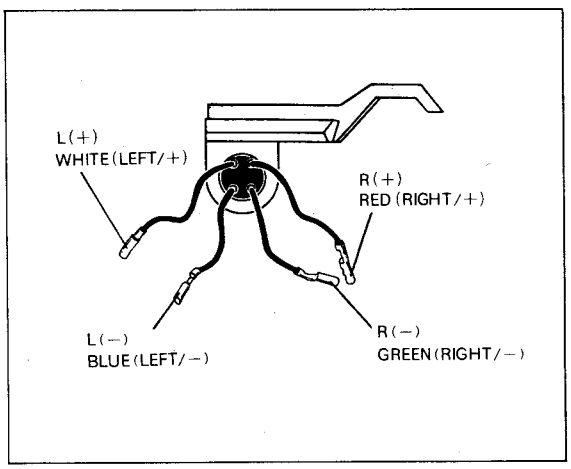


Fig. 3

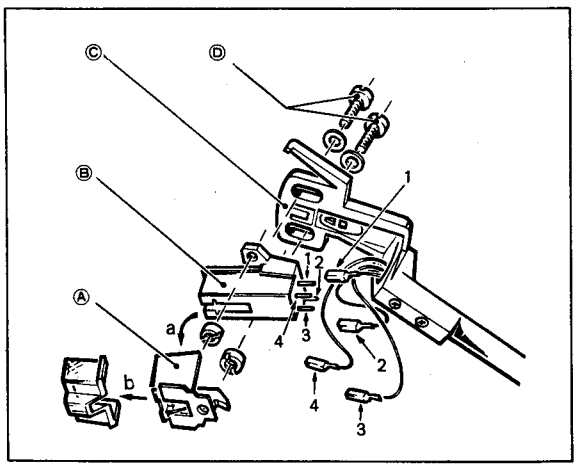


Fig. 4

Ⅲ. STYLUS POINT HEIGHT(Fig.5, Fig.6)

In case the oil lifter is not functioning properly(e.g., lifting the tonearm too high or too low), adjust the screw(43) as shown to reset for a proper elevation lenvel.

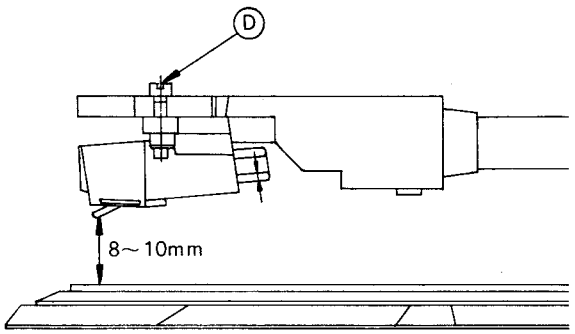


Fig. 5

Ⅳ. TONEARM AUTO-RETURN(Fig. 6)

In case the tonearm is not being properly returned (lifted from the record too early or too late), you may re-set for the proper returning point by adjusting the screw(88) on the tonearm base as shown.

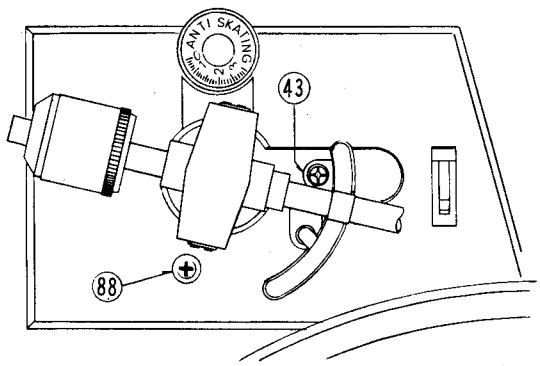


Fig. 6

Ⅴ. STYLUS PRESSURE ADJUSTMENT

1. Adjust the counter weight so that the tonearm will be balanced horizontally(the cueing button must be at down position).
2. After the horizontal balancing, turn the counter ring only and set to "**0(zero)**" position in line with the marker on tonearm(do not touth the counter weight).
3. Turn the counter weight clockwise to set the reading on the gauge ring to the designated stylus pressure(grams) of your cartridge.

Ⅵ. SPEED ADJUSTMENT(Fig. 7)

1. Set the speed 33-1/3rpm and adjust the VR1 on the "MOTOR CONTROL P.C BOARD" using a small screwdriver.
2. Set the speed 45rpm and adjust the VR2 on the "MOTOR CONTROL P.C BOARD" using a small screwdriver.

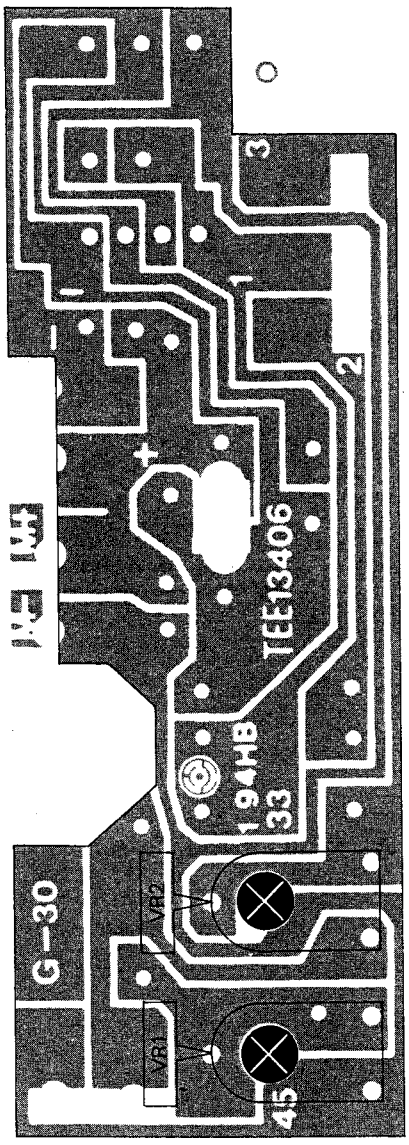
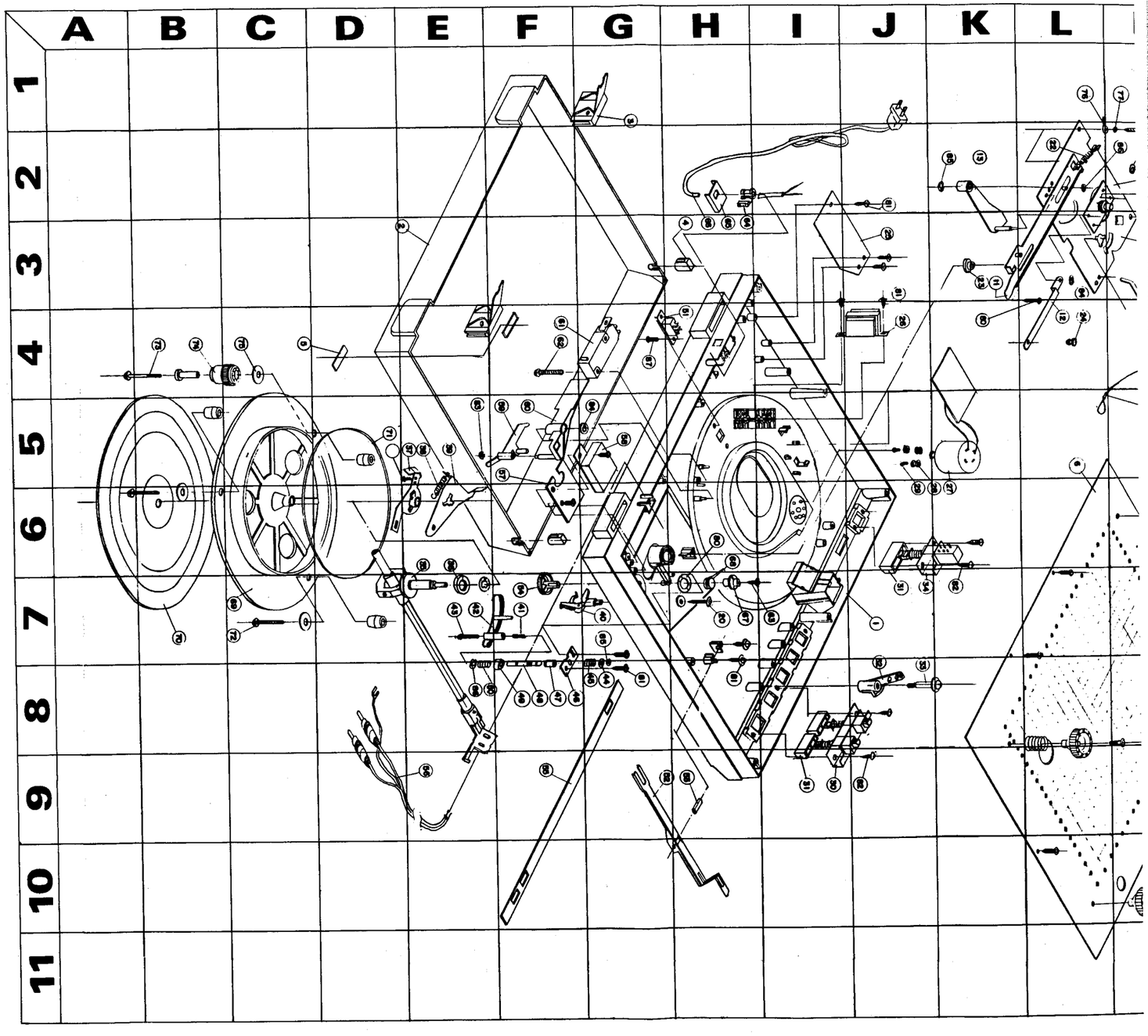


Fig. 7

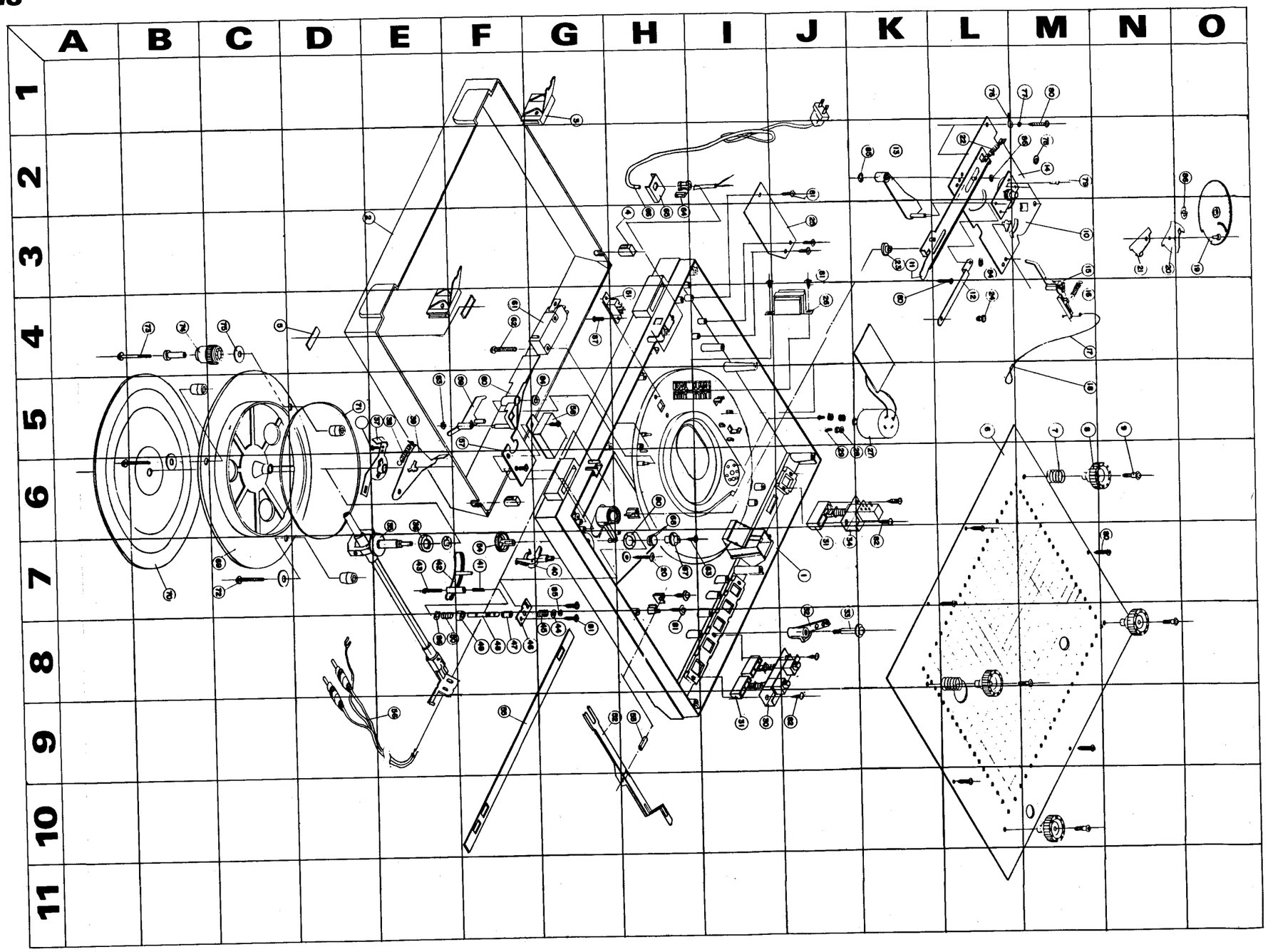
Parts List & Exploded View of Cabinet & Chassis

REF.NO.	PARTS NO.	DESCRIPTION	Q'TY	POSITION
1	6021000810	CABINET MAIN	1	J7
2	8552000210	DUST COVER	1	E3
3	6548000260	HINGE	2	G1
4	6525100310	DAMPER PIN	2	H3
5	048635001534	NAME PLATE	1	D4
6	6122410010	BOTTOM BOARD	1	L5
7	6555004210	SPRING	2	M5
8	6033100710	RUBBER FOOT	4	M5
9	8155000340	SHOULDER SCREW	4	N5
10	6133300310	BASE PLATE	1	M3
11	7143102210	SLIDE ARM	1	K3
12	7145101310	JOINT LEVER	1	L4
13	7143102010	TRIP LEVER	1	K2
14	057115001430	SPINDLE ASS'Y	1	M2
15	7143200111	REJECT ARM	1	M3
16	6555302410	SPRING	1	M4
17	1728000201	DIAL CORD	0.3MT	M4
18	8269020077	HADOMAI	1	M5
19	7103000210	MAIN GEER	1	O3
20	6135300110	LOW WATER RIPPLE POLE	1	N3
21	6135300210	ENGAGEMENT PULL	1	N3
22	6555302510	SPRING	1	L2
23	6745000230	SPACER	1	K3
24	7005004410	PUSH PIN	1	L4
25	4005410601	SUPPLY PCB	1	J3
26	2828032201	P.W TRANS	1	J4
27	5558101710	MOTOR	1	K6
28	6715007910	VABRATION RUBBER	3	K6
29	8095000810	SCREW	3	K6
30	4628007640	PUSH S/W	1	I9
31	8545012810	PUSH BUTTON	3	I9
32	7145000410	FUNCTION LEVER	1	J8
33	8155000310	SHOULDER SCREW	1	J8
34	4628007820	PUSH S/W	1	J7
35	5038001510	TONE ARM ASS'Y	1	E6
36	8395000210	WASHER	1	E6
37	6513002310	STOPPER	1	E5
38	6555301140	SPRING	1	E5
39	7145101210	RESTORE LEVER	1	E5
40	6513001111	ARM HOLDER	1	G7
41	6555001110	SPRING	1	F7
42	7143200610	ARM SUPPORTOR	1	E7
43	8019130143	SCREW	1	E7
44	8305001910	WASHER	1	G8
45	6555001520	SPRING	1	G8
46	6505027510	BKT ELEVATION	1	F8
47	7015000320	BUSHING	1	F8
48	7005000810	SHAFT	1	F8
49	6165106510	CAP LIFTER	1	F8
50	6555001420	SPRING	1	E8
51	4618000410	SELECTOR S/W	1	H4
52	7143200710	CUEING LEVER	1	H9
53	7005004510	CUEING PIN	1	G9
54	8545005310	KNOB CONTROL	1	F7
55	8533000722	INLAY	1	F9
56	4328200610	RCA CORD	1	E9
57	4005411020	PHONO PCB	1	F9
58	6163101320	SHIELD PLATE	1	G5
59	7143101110	HOLDER	1	F5
60	7143101021	LEVER	1	F5
61	4668000250	MICRO S/W	1	F4
62	8109230181	SCREW	1	F4
63	8159230061	SCREW	1	H7
64	6518000111	CORD STOPPER	1	H3
65	6505028310	BKD	1	H3
66	4308000220	P.W CORD	1	H3
67	7145000310	LEVER ANTI SKATING	1	H7
68	6556029020	SPRING ANTI SKATING	1	H6
69	7122200710	PLATTER	1	C7
70	7182000320	RUBBER SHEET	1	B7
71	7165000910	BELT	1	D5
72	8159240301	SCREW	1	C7
73	8159640571	SCREW	1	B4
74	5035200340	MAIN WEIGHT	1	B4
75	9057009200	LABEL	1	C4
76	4205000810	LUG TERMINAL	1	L1
77	8319130011	SPRING WASHER	1	M2
78	8305001820	WASHER	1	M2
79	8119430061	SCREW	1	M2
80	6745000110	WASHER WAVE	1	H6
81	8159130081	SCREW		
82	8119130061	SCREW		
83	8335200110	C.S RING ϕ2		
84	8335200210	C.S RING ϕ3		
85	8339030011	E. RING ϕ3		
86	8339040011	E. RING ϕ4		
87	8019130081	SCREW	2	G4
88	8019130141	SCREW	1	E5



& Chassis

N	Q'TY	POSITION
	2	G4
	1	E5



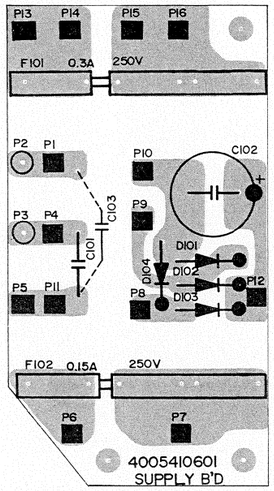
Parts List & Top View of P.C Boards

MOTOR CONTROL P.C BOARD TEE13406

Ref. No.	Parts No.	Description	Position
●IC			
IC		LA5515	
●CAPACITOR			
C1		E.C 4.7μF 35V	
C2		C 0.022μF 50V	
C3		C 0.0047μF 50V	
●RESISTORS			
R1, R2		C.F 820 ohm ¼W	
R3		C.F 3.3K ohm ¼W	
R4		C.F 1.2K ohm ¼W	
R5		C.F 1.3K ohm ¼W	
R6		C.F 1K ohm ¼W	
VR1		SEMI 10K ohm	
VR2		SEMI 10K ohm	

POWER SUPPLY P.C BOARD 4005410601

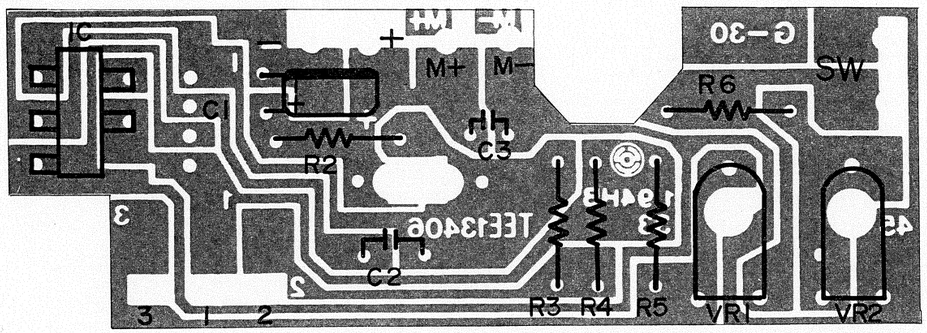
Ref. No.	Parts No.	Description	Position
●DIODES			
⚠ D101	2058106100	1N 4002	
⚠ D102	2058106100	1N 4002	
⚠ D103	2058106100	1N 4002	
⚠ D104	2058106100	1N 4002	
●CAPACITORS			
C101		Cap E 1000μF/25V	
D102		Cap C 0.01μF/400VAC	



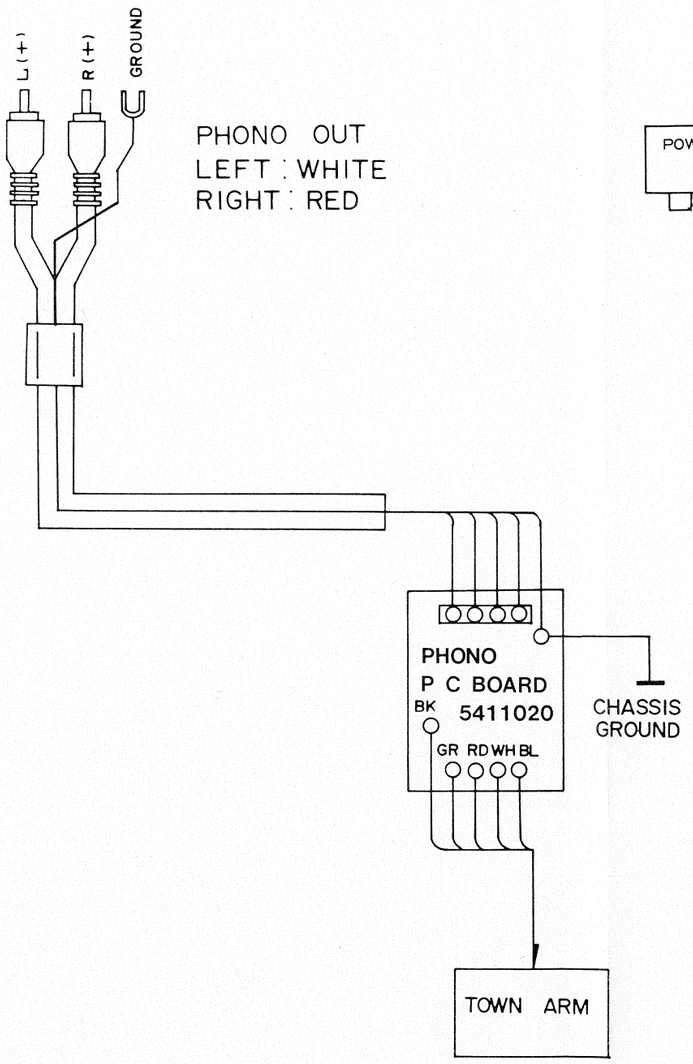
POWER SUPPLY P.C BOARD 4005410601

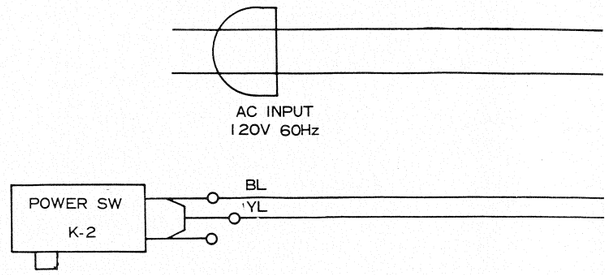
To service personnel
Make sure that only replacement part recommended by the manufacturer should be used when the parts marked "⚠" in schematic diagram are exchanged.
Never fail to make leakage-current or resistance measurements before returning the appliance to the customer so as to make sure that exposed parts are acceptably insulated from the supply circuit.

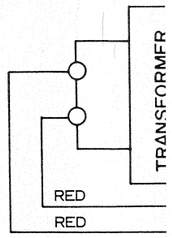
MOTOR CONTROL P.C BOARD TEE13406

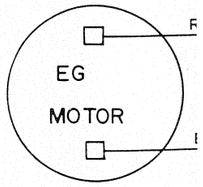


Point to Point Wiring Diagram









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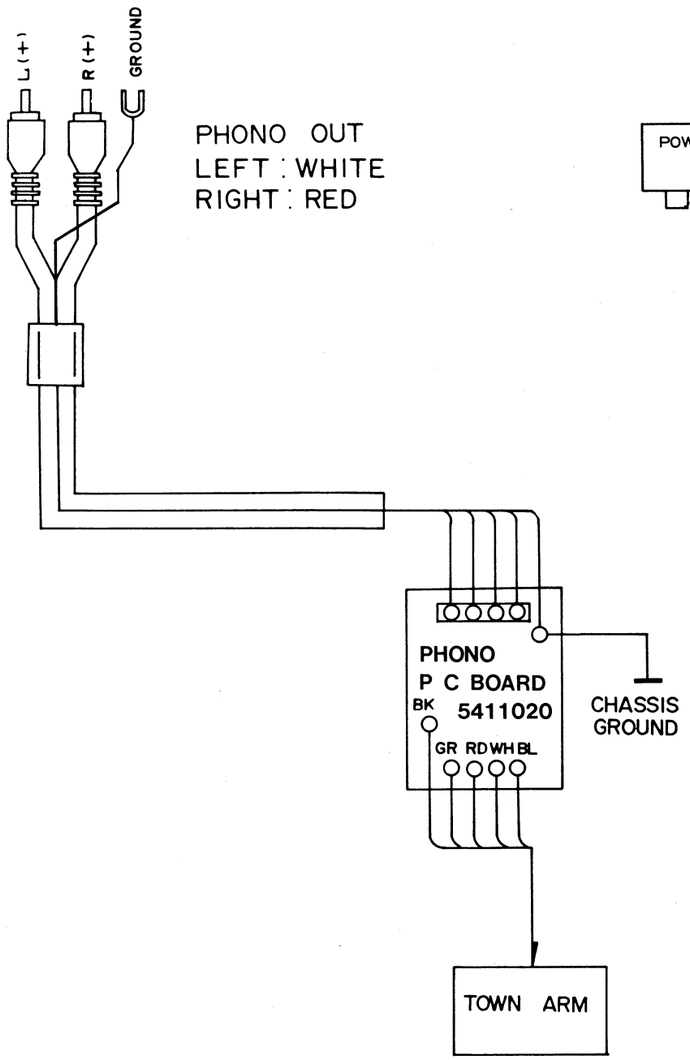
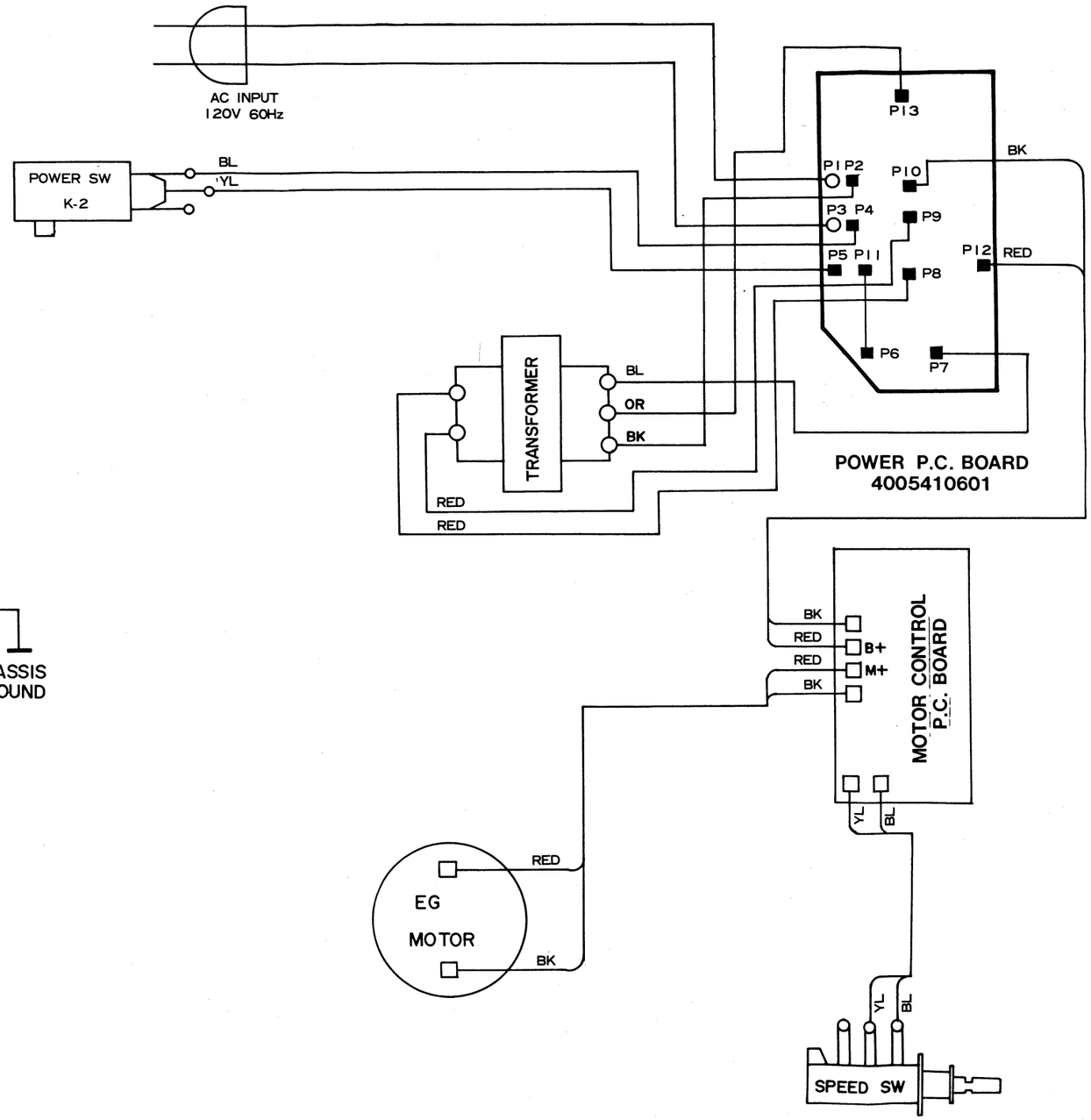
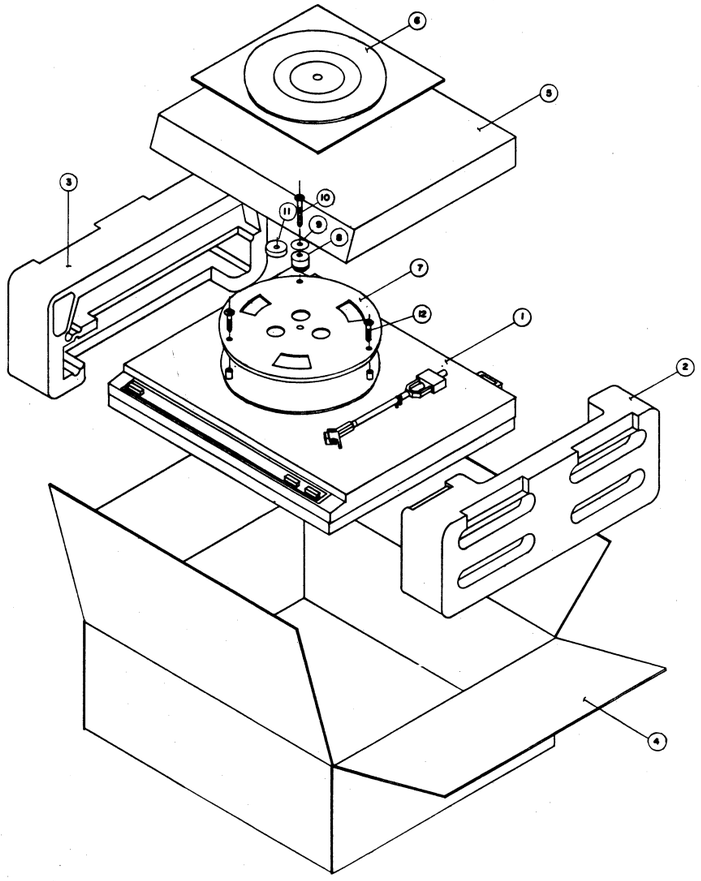


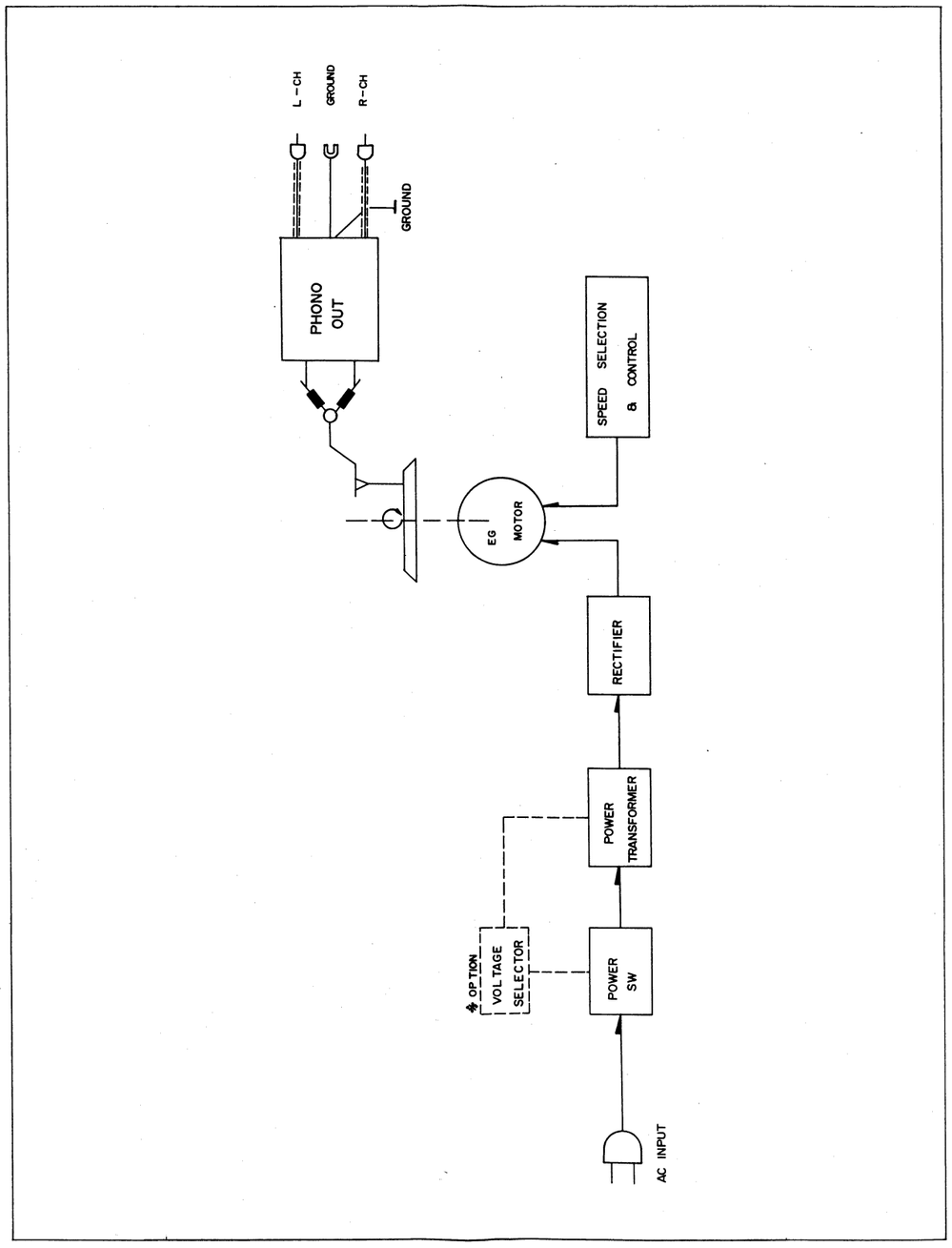


Packing View & Parts List

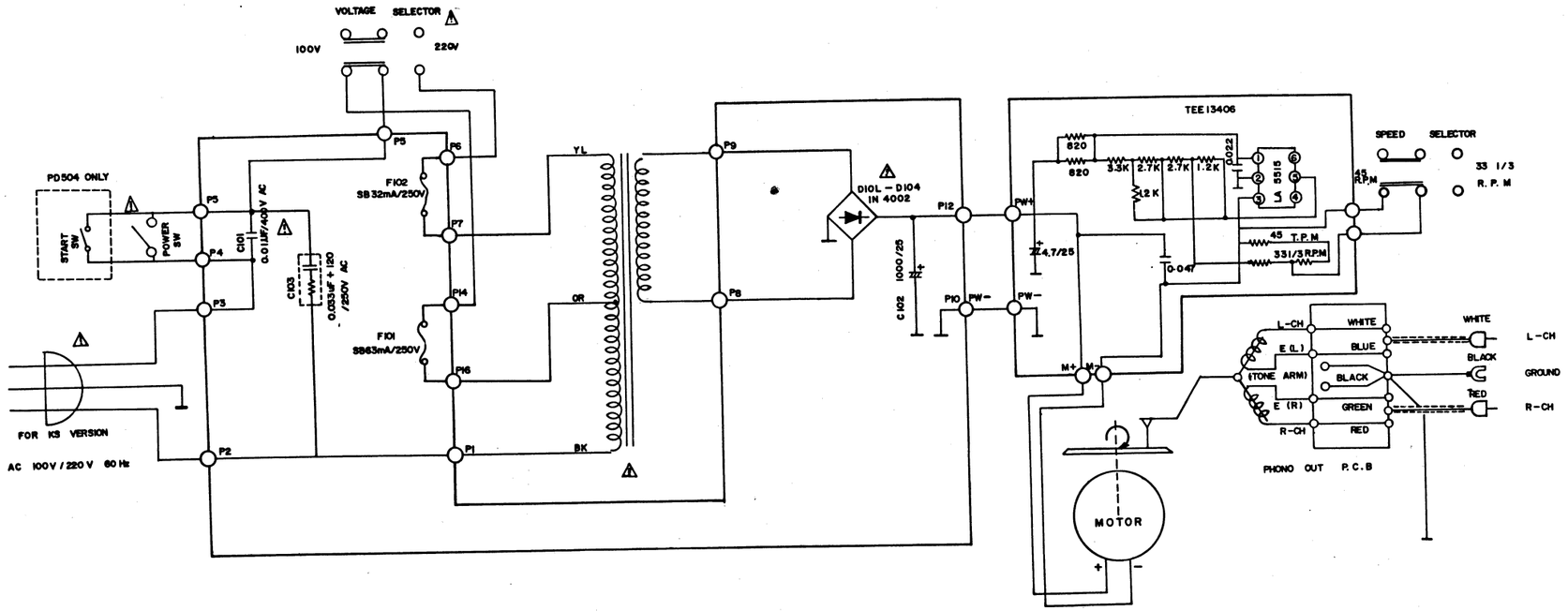
Ref. No.	Parts No.	Description	Q'ty
1	046021000815	MAIN CABINET	1
2	9722007110	R-CUSHION	1
3	9722008110	L-CUSHION	1
4	049605050543	CARTON BOX	1
5	8552000212	DUST COVER	1
6	7182000320	RUBBER SHEET	1
7	047122200710	PLATTER	1
8	5035200340	WEAGHT	1
9	9057009200	LABEL	3
10	8139240571	SCREW RTC 4×57Y	1
11	7063200201	EP ADAPTOR	1
12	8139640401	SCREW RTC 4×40Y	2

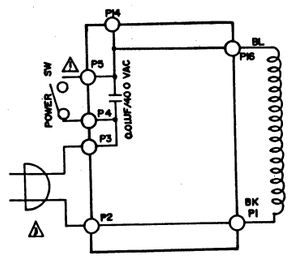


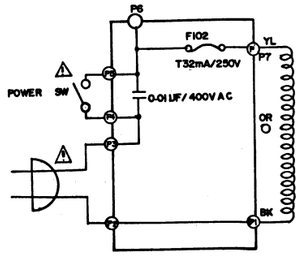
Block Diagram

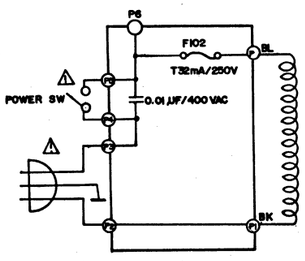


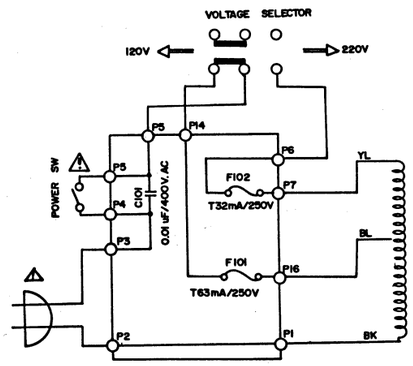
Schematic Diagram











NOTE 1. RESISTANCE VALUES ARE INDICATED IN OHMS UNLESS OTHERWISE SPECIFIED
(K=1.000 M=1.000.000)
2. CAPACITANCE VALUES ARE SHOWN IN MICROFARADS UNLESS OTHERWISE NOTED
3. THE ⚠ MARK FOUND ON SOME COMPONENT PARTE INDICATES THE IMPORTANCE OF THE SAFETY OF THE PARTS
THEREFORE, WHEN REPLACING, BE SURE TO USE PARTS OF INDENTICAL DESIGNATION.